

*Sub
B/C2*

applying the reference drive signal to the respective piezoelectric vibrators to jet liquid droplet from the nozzle orifices;
measuring amounts of the respective liquid droplets jetted by the reference drive signal;
identifying a difference between the designated amount and the measured amount of each liquid droplet;
providing correction data for reducing the difference; and
adjusting a displacement behavior of a piezoelectric vibrator associated with the identified nozzle orifice, based on the correction data.

*B/2
Sub
C2*

3. (Amended) A method of jetting liquid droplets, comprising the steps of:
providing a liquid jetting head which includes: a plurality of nozzle orifices; a plurality of pressure generation chambers associated with the nozzle orifices; and a plurality of piezoelectric vibrators for respectively varying the volume of the associated pressure generation chamber to jet a liquid droplet from the associated nozzle orifice;
setting a single jetting cycle as a period in which N drive signals are applicable to the piezoelectric vibrators to jet liquid droplets from the nozzle orifices, N being an integer;
providing ID data for identifying the respective nozzle orifices;
providing a reference drive signal which is applied to the piezoelectric vibrator such that a reference liquid droplet having a designated amount is jetted from the nozzle orifice;
applying the reference drive signal to the respective piezoelectric vibrators to jet liquid droplets from the nozzle orifices;

Sub 2 cont
BB
measuring amounts of the respective liquid droplets jetted by the reference drive signal;
identifying a difference between the designated amount and the measured amount of each liquid droplet;
providing correction data for reducing the difference;
selecting M drive signals from the N drive signals based on the correction data, M being an integer which is equal to or less than N; and
applying the M drive signals to the piezoelectric vibrators within the single jetting cycle.

BB
Sub C3
6. (Amended) A liquid jetting apparatus, comprising:
a liquid jetting head including: a plurality of nozzle orifices; a plurality of pressure generation chambers associated with the nozzle orifices; and a plurality of piezoelectric vibrators for respectively varying the volume of the associated pressure generation chamber to jet a liquid droplet from the associated nozzle orifice;
a drive signal generator, for generating a plurality of drive signals, respectively driving the piezoelectric vibrators, within a single jetting cycle of the liquid jetting head;
an ID data storage, for storing ID data which identifies the respective nozzle orifices;
a reference drive signal generator, for generating a reference drive signal which is applied to the piezoelectric vibrator such that a reference liquid droplet having a designated amount is jetted from the nozzle orifice;
a reference drive signal applier, for applying the reference drive signal to the respective piezoelectric vibrators to jet liquid droplet from the nozzle orifices;

an identifier, for measuring amounts of the respective liquid droplets jetted by the reference drive signal, and identifying a difference between the designated amount and the measured amount of each liquid droplet;

a correction data storage, for storing correction data which reduces the difference; and

a drive signal supplier, for selecting at least one drive signal from the plural drive signals to adjust a displacement behavior of a piezoelectric vibrator associated with the identified nozzle orifice, based on the correction data.

8. (Amended) A liquid jetting apparatus, comprising:

a liquid jetting head including: a plurality of nozzle orifices; a plurality of pressure generation chambers associated with the nozzle orifices; and a plurality of piezoelectric vibrators for respectively varying the volume of the associated pressure generation chamber to jet a liquid droplet from the associated nozzle orifices;

at least one drive signal generator, for generating N drive signals, respectively driving the piezoelectric vibrators, within a single jetting cycle of the liquid jetting head, N being an integer which is not less than 3;

an ID data storage, for storing ID data which identifies the respective nozzle orifices;

a reference drive signal generator, for generating a reference drive signal which is applied to the piezoelectric vibrator such that a reference liquid droplet having a designated amount is jetted from the nozzle orifice;

sub Cyp
sub
BT
a reference drive signal applier, for applying the reference drive signal to the respective piezoelectric vibrators to jet liquid droplets from the nozzle orifices;

an identifier, for measuring amounts of the respective liquid droplets jetted by the reference drive signal, and identifying a difference between the designated amount and the measured amount of each liquid droplet;

a correction data storage, for storing correction data which reduces the difference; and

a drive signal supplier, for identifying a nozzle orifice in which the jetting amount is to be corrected, through use of the ID data, and selecting M drive signals from the N drive signals to adjust a displacement behavior of a piezoelectric vibrator associated with the identified nozzle orifice, based on the correction data, M being an integer which is equal to or less than N.
